## SUBJECT CODE: 15CM/AC/PF25

## B.C.A. DEGREE EXAMINATION APRIL 2016 <br> SECOND SEMESTER

| COURSE | $:$ | ALLIED - CORE |
| :--- | :--- | :--- |
| PAPER | $:$ | PRINCIPLES OF FINANCIAL MANAGEMENT |
| TIME | $:$ | 3 HOURS |

## SECTION - A

I. ANSWER ALL THE QUESTIONS
$(10 \times 2=20)$

1. Define financial management.
2. What is profit maximization?
3. What do you mean by time value of money?
4. Enumerate any four determinants of working capital.
5. Define Capital Budgeting.
6. Mr. David deposits Rs. 15,000 at $10 \%$ for 15 years. The interest is compounded annually. Find the maturity value of the deposit.
7. The following information is available in respect of Abraham Ltd.

Stockholding: Raw materials: 1 month; Work-in-progress: 15 days; Finished goods: 1 month
Debtors collection period: 2 months. Calculate operating cycle.
8. A project requires initial investment of Rs. 85,000 and is expected to give each inflows for 5 years. The PV of cash inflows is Rs. 92,000 . Calculate the profitability index of the project.
9. From the following estimated information, prepare a Cash Budget for June 2016:

|  | Rs. |
| :--- | ---: |
| Cash in hand on 1.6.2016 | 20,000 |
| Cash purchases for June 2016 | $1,40,000$ |
| Cash sales for June 2016 | $2,00,000$ |
| Interest payable in June 2016 | 2,000 |
| Purchase of office furniture in June 2016 | 5,000 |

10. A project costs Rs. 2, 50,000 and yields an annual cash inflow of Rs.50, 000 for 7 years. Calculate its pay-back period.

## SECTION - B

II. ANSWER ANY FIVE QUESTIONS
(5 X $8=40$ )
11. Discuss the role of a finance manager.
12. What is cash management? State the objectives of cash management. What are the motives for holding cash?
13. Dhyaneesh has rented out a shop for 5 years at an annual rent of Rs.36, 000. The tenant has agreed to the condition that the rent will increase by $5 \%$ every year. If the required rate of return is $10 \%$. Find out the present value of the expected series of rents.
PV Factor @ 10\%

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Value | 0.909 | 0.826 | 0.751 | 0.683 | 0.621 |

14. From the following information, calculate the average amount of working capital required.

|  | Rs. (P.a.) |
| :--- | :---: |
| Stock of finished goods and work in progress | 10,000 |
| Stock of stores and materials | 8,000 |
| Average credit to local customers 2 weeks | $1,04,000$ |
| Average credit to outside customers 6 weeks | $3,12,000$ |
| Credit available for payment of purchases 4 weeks | 78,000 |
| Credit available for payment of wages 2 weeks | $2,60,000$ |
| Add $10 \%$ for contingencies |  |

15. The following forecasts are provided in respect of Ellis Ltd. for the year 2015:

Rs.
Sales
13, 50,000
Purchases
9, 00,000
Cost of goods sold
9, 15,000
Average debtors
1, 50,000
Average creditors
80,000
Average stock 1, 52,000
Find out the cash operating cycle given that all sales and purchases are made on credit.
16. Prepare a cash budget for the month of February 2010, from the following information:
Sales for January and February are Rs.1,80,000 and Rs. 2,00,000 respectively.
Purchases for January and February are Rs. 1,20,000 and Rs. 1,40,000 respectively. Wages for January and February are Rs. 12,000 and Rs. 20,000 respectively. 50\% of sales is realized in the month of sale and remaining $50 \%$ in the month following. Purchases are paid in the month following the month of purchases. Wages are paid in the same month. Cash in hand (estimated) on $1^{\text {st }}$ February is Rs. 5,000.
17. Project K requires an investment of Rs. 20,00,000 and yields profits after tax and depreciation as follows:

| Year: | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Profits after tax
and depreciation(Rs.) 1,00,000 1,50,000 2,50,000 2,60,000 1,60,000 At the end of the $5^{\text {th }}$ year, the plant can be sold for Rs. $1,60,000$. You are required to calculate ARR.

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## SECTION - C

## III.ANSWER ANY TWO QUESTIONS

18. a) Describe the compounding techniques of time value of money.
b) Hakim pays a monthly installment of Rs.2, 000 towards a recurring deposit with a financier. The rate of interest is $6 \%$ p.a. compounded monthly. What is the maturity value of this recurring deposit after the $10^{\text {th }}$ month?
19. X co. desires to purchase a business and has consulted you and one point on which you are asked to advise them is the average amount of working capital which will be required in the first year's working.
You are given the following estimates.
i) Average amount locked up in stocks:
Rs. (p.a.)
Stock of finished goods
5,000
Stock of stores and materials
8,000
ii) Average credit given:
Inland sales - 6 weeks
3, 12,000
Export sales - 1 week
78,000
iii) Lag in payment of wages and other outgoings:
Wages - 1 week
2, 60,000
Rent - 6 months
10,000
Clerical staff salary - $1 / 2$ month
62,400
Manager salary - $1 / 2$ month
4,800
Miscellaneous expenses - 1 month 48,000

Set up your calculations for the average amount of working capital required.
20. From the following data, prepare a cash budget for the months commencing $1^{\text {st }}$ June 1996, when the bank balance was Rs.1, 00,000.

| Month | Sales | Purchases | Wages | Production <br> expenses | Administration <br> expenses |
| :---: | :---: | :---: | :---: | :---: | :---: |
| April | 80,000 | 41,000 | 5,600 | 3,900 | 10,000 |
| May | 76,500 | 40,500 | 5,400 | 4,200 | 14,000 |
| June | 78,500 | 38,500 | 5,400 | 5,100 | 15,000 |
| July | 90,000 | 37,000 | 4,800 | 5,100 | 17,000 |
| August | 95,000 | 35,000 | 4,700 | 6,000 | 13,000 |

There is two months credit period allowed to customers and received from suppliers. Wages, production expenses and administration expenses are payable in the following month.

21．A choice to be made between two projects which requires an equal investment of Rs．50，000 and are expected to generate net cash flows as under：

|  | Project A | Project B |
| :--- | :---: | :---: |
|  | Rs． | Rs． |
| End of year 1 | 25,000 | 10,000 |
| End of year 2 | 15,000 | 12,000 |
| End of year 3 | 10,000 | 18,000 |
| End of year 4 | Nil | 25,000 |
| End of year 5 | 12.000 | 8,000 |
| End of year 6 | 6,000 | 4,000 |

The cost of capital is $10 \%$ ．

| Year | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| PV factor＠ $10 \%$ | 0.909 | 0.826 | 0.751 | 0.683 | 0.621 | 0.564 |

Which project proposal should be chosen，if you evaluate the project proposals under
a）Pay－back period
b）Discounted Cash Flow method．

